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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
09/121,702	07/24/98	BECK	016906/0183

EXAMINER	
ART UNIT	PAPER NUMBER
3743	16

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This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 3-22-2000 (request for CPA).

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1, 3-9 and 11 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 3-9 and 11 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

★ U.S. GPO: 1996-409-290/40029

Paper No. 11 (after final amendment received January 24, 2000) has been entered, in this CPA. Applicants' remarks ~~abut~~ about the drawing objection are moot in light of the proposed correction to Figure 3 submitted March 22, 2000. That proposed correction has been approved. Previously approved were proposed drawing correction received April 19, 1999 (for Figs 1 & 2).

Applicants' comment about the "Heinz-ord" reference have been considered. It is now clear that all of the errors associated with "Heinz-oder" -- missing pages, incorrect citation on the PTO-1449 form, failure to disclose co-pending SN 08/965,962 etc. originated outside the PTO.

On page 3, of Paper No. 11, fourth paragraph, applicants offer a translation of the priority document but have, as yet, to produce one. The examiner is requiring one now. See MPEP 201.13 & 201.14 and 37 C.F.R. 1.55. Until priority is perfected the rejection stands. "Heinz-Oder" is prior art until priority is perfected.

On the merits of the rejection applicants argue no motivation to modify Heinz in view of the teachings of Serratto and/or Jorgensen. Counsel's analysis dwells on Heinz's flaps 14 and 15 not being "bypass valves or flaps". In the end it is no more than semantics. The combination of Heinz and Serratto and/or Jorgensen renders the claimed subject matter obvious, notwithstanding Counsel's remarks to the contrary which dwell on the disclosed invention and not the claimed invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JA 58-136813 (Fig. 2 or Fig. 3) in view of Inoue (USP 5,775,407) and optionally Sdeb (DT 3514359).

JA '813 (Fig. 2) teaches a heater 12 having cold air flaps 10 and 11 and control lamellae 18 and 19. Cold air ducts 8 and 9 ~~is~~ are laterally spaced from the heater 12 (above and below it) and the air flow through those ducts is controlled by cold air flaps 10 and 11. Figure 3 of JA '813 is similar to Figure 2 except that flaps 10 and 11 have been replaced by a plurality of cold air flaps 20 and 21 (any one of which flaps 20 and 21 is deemed to be a "cold-air flap"). A single horizontal partition wall divides the casing into an upper and lower air-mix zone downstream of the heater 12 which allows for improved control over air temperature from the flows discharging into ~~sold~~ foot outlet 3, vent outlet 2 and defrost outlet 4.

Inoue teaches is the same art forming a horizontal partition 17 to split the HVAC casing not two halves to permit the control of air temperature for the right side of the car independently of the left side of the car. Inoue also teaches lateral cold-air bypasses (18 and 19) on the right and left sides of the partition plate 17.

To have split the casing of JA 58-136813, Figs. 2 or 3, two, vertically, by installing a vertical partition in the manner taught by Inoue (at 17) to permit the driver and passenger to have independent control over their respective air temperature (to improve comfort) would have been

obvious to one of ordinary skill. This would obviously require independent actuator for the air control flaps and lamellae on each side of the partition wall. See Egawa 0122213, not relied upon in the rejection, for how independent actuators (14 & 15) are connected to air control elements on either side of partition wall 8 of Egawa.

DT 3514359 reinforces the above combination of references explicitly in regard to Figures 4-6 a vertical partition 1 (like Inoue's) splitting the casing into right and left halves and a horizontal partition 16 splitting the casing into upper and lower halves. In all four independent air mix zones 24, 25, 26 and 27 are formed. Regarding claim 4 DT '359 teaches deflection in the manner claimed and it would have been obvious to have moved dampers 20 and 21 of JA '813 in the manner claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sbed (3514359) in view of JA 58-136813.

Figures 4-6 of Sbed disclose a form zone system downstream of heater 3 and heater 4. Cold air bypass flaps 7, 8 and 7' and 8' close off four cold air bypasses. Air mix dampers 5, 6 in both Figure 5 and 6 control cold/hot air mix ratios. To have modified Sbed with either of the configurations for the heater/bypass configurations taught by JA '813 to permit the use of a single

heater core rather than a split heater core as taught by Sbed would have been obvious to one of ordinary skill. The proposed modifications are shown on the next page.

Modification I

Fig. 5

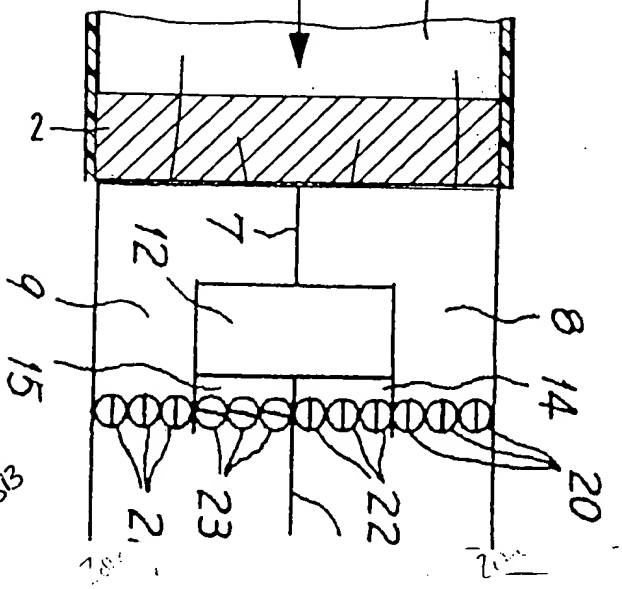
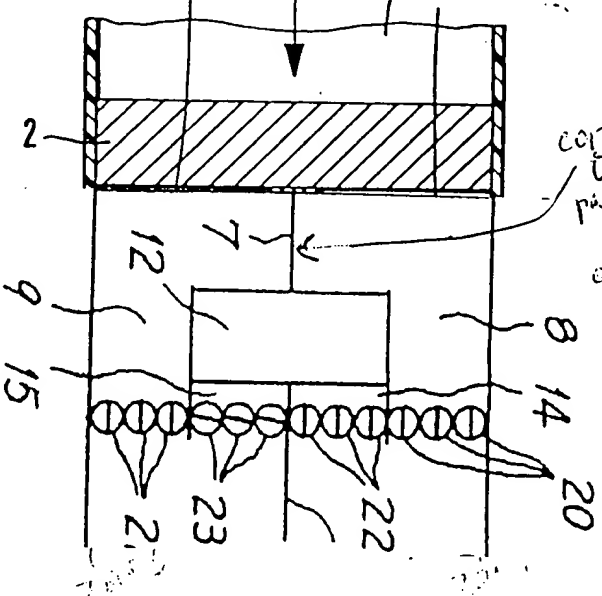


Fig 3 of JA '813

Fig. 6



Modification II

Fig. 5

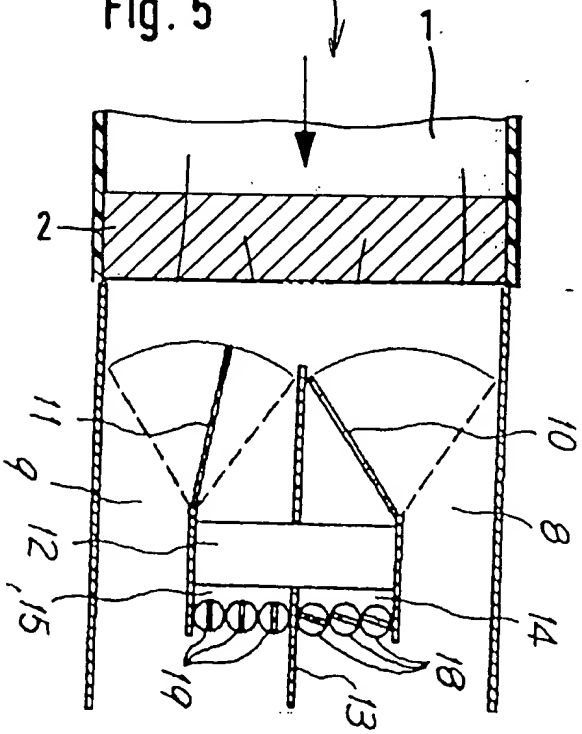
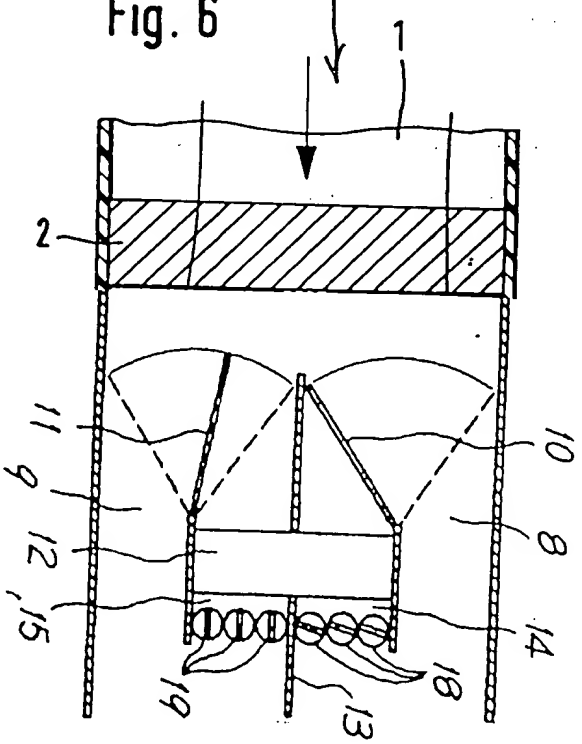


Fig 2 of JA '813

Fig. 6



Claims 7, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art as applied to claim 1 above, and further in view of Sarbach.

Sarbach teaches a parallel electric heater and coolant heater which would have been obvious to substitute for the single heater core shown in the prior art where mounting on an electric vehicle was being contemplated.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art as applied to claim 1 above, and further in view of Denk et al.

Denk teaches using lamella to mix flows ~~a-t~~ col. 3, lines 46-48. To have used configured the flaps and lamellae of the prior art to help mix the flows in the air-mix chambers would have been obvious to improve temperature control.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 4 above, and further in view of Sugawara et al. or Moore.

To have used curved flaps to help direct flow to the desired location would have been obvious in view of the teaching of Sugawara. Similarly to have used curved air-foil shaped flaps to reduce pressure drop would have been obvious in view of Moore.

The final rejection set forth in Paper No. 10 is incorporated by reference here, in its entirety, and remains in effect until such time as applicants perfect their priority claim, by complying with 37 C.F.R. 1.55.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to John Ford at telephone number (703) 308-2636.

John K. Ford
Primary Examiner

J. FORD:LM
APRIL 26, 2000